Appl. No.

10/770,884

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February 2, 2004

16. AMENDMENTS TO THE DRAWINGS

Drawings 3 and 4 have been resubmitted in black ink as required by the Examiner.

The drawings of Figure 2 have been corrected to refer to "heat reactor housing."

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Moore discloses a muffler invention as having "maximum efficiency as a silencer", page 1, line 32 and "thoroughly mixing the exhaust gases", page 1, lines 37, 38. Moore, however totally fails to conceive, suggest or teach any kind of mixing exhaust gases in a combustion chamber. Rather, Moore expressly states that one of the objects of his invention is "to cool the gases by radiation." See page 1, line 17 and page 2, line 33. Applicant submits that one of ordinary skill would not assume that the spiral units 11 of Moore could be advantageously incorporated into a combustion chamber of a heat reactor since this would totally change the basic cooling principle under which Moore was designed to operate. Applicant respectfully submits that the Moore reference fails to establish a prima facie cost of obviousness. See In re Ratti, 270 F.2d at 813 cited by M.P.E.P. § 2143.01 (VI).

Moreover, the disclosure of a cooling apparatus as taught by Moore fails to suggest any motivation to place the Moore apparatus into a combustion chamber. (See M.P.E.P. 2143.01 (I).

The remaining dependent claims 2-11 and newly submitted dependent claim 12 are respectfully submitted to recite patentable subject for the reasons discussed above.

Newly submitted method claims 13-15 are respectfully submitted to be patentable over the cited references. These claims recite "flowing polluted air and fuel into an elongated tubular housing..., igniting said fuel and polluted air mixture to produce sufficient heat to convert said mixture into a gaseous form; and forcing said gaseous mixture through said flow conditioner to create a spiraling motion". As described above, no suggestion or teaching of these method steps can be established by the cited art. These claims are respectfully submitted to be in condition for allowance.

In view of the foregoing comments, it is respectfully submitted that the present application is fully in condition for allowance, and such action is earnestly solicited. If any questions remain, however, the Examiner is cordially invited to contact the undersigned Applicant so that any such matters may be promptly resolved.

Respectfully submitted,

Dated: 8/21/06

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REMARKS

Information Disclosure Statement

As required by the Examiner, an Information Disclosure Statement conforming to 37 C.F.R. 1.97, 1.98 and MPEP § 609 is being filed with this Response.

Claim Objections

Claim 1 has been amended to correct the informality noted by the Examiner. The phrase, "vertically positioned within said elongated tubular housing" has been deleted and corrected to read "substantially perpendicular positioned along the axis of the tubular housing."

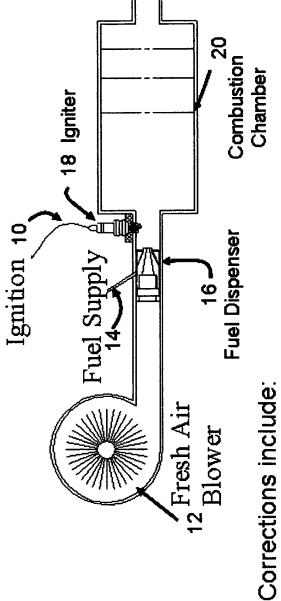
Claim Rejections 35 U.S.C. § 112

Claim 5 has been rejected on the basis that the specification does not enable a "flow conditioner coated with a high heat-resistant material." The Examiner's rejection is respectfully traversed. As set forth in the M.P.E.P. § 2164, "Furthermore, when the subject matter is not in the specification portion of the application or filed but is in the claims, the limitation in and of itself may enable one skilled in the art to make and use the claim containing that limitation." (emphasis added) This limitation is, of course, in a claim. Moreover, high temperature coatings are well known in the prior art. See e.g., the cited Gordon patent 4,183,896. Thus, there clearly is no need for undue experimentation by someone skilled in the art to select a high heat-resistant coating material.

Claim 9 has been rejected under 35 U.S.C. § 112, first paragraph, because the specification does not reasonably provide enablement for "resultant pollution free hot gases and/or air. While the specification supports a heat reactor that produces low or virtually no pollution (99.99%), it does not support the breadth of a claim asserting pollution-free combustion." Applicant respectfully traverses this rejection since the pollution-free limitation referred to is in the claims and therefore does enable this limitation pursuant to M.P.E.P. § 2164.

Claims Rejections - 35 U.S.C. § 103

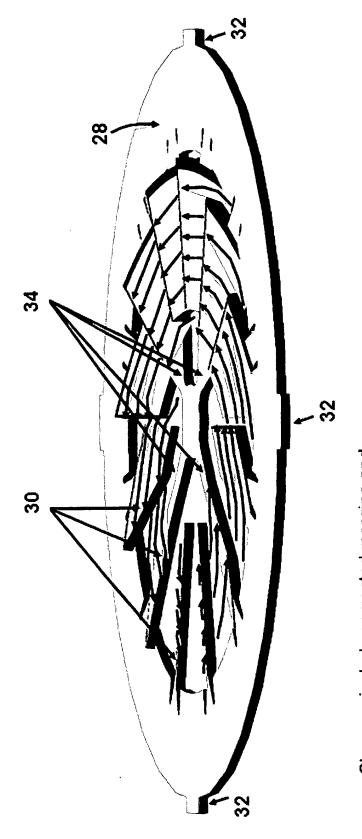
Claims 1, 2, 4, and 6-11 have been rejected under 35 U.S.C. § 103(a) "as being unpatentable over admitted prior art in Figure 1 and in view of Moore (1,745,632)." Applicant respectfully traverses this rejection because Moore, alone or in combination with Figure 1, fails to disclose, teach or suggest the elements of this claim.



Text (Combustion Chamber) has been changed to read (Heat Reactor Housing)

FIGURE 2





Changes include corrected margins and deletion of arrows indicating flow



Figure 4

